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THE RELIABILITY OF THE INTERVIEW METHOD IN AN OFFICER CANDIDATE EVALUATION PROGRAM¹

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INTRODUCTION

THE medico-psychological program at the U. S. Coast Guard Academy has directed a major part of its effort toward the evaluation of officer candidates. The officer candidates involved may be divided into three distinguishable groups: (1) Regular Cadets, undergoing a four-year Academy training for Regular Commissions; (2) Candidates for Reserve Commissions (CRCs), undergoing an intensive 17-week training course for Reserve Commissions; and (3) SPAR Cadets, undergoing an 8- to 12-week training course for commissions in the U. S. Coast Guard Women's Reserve. Several thousand candidates have been studied and evaluated. The evaluations were based upon (a) the administration of an appropriate battery of aptitude, achievement, and personality tests and (b) interviews with each candidate. The methods, procedures, and results of this program of officer candidate evaluation have been reported in some detail elsewhere (2, 3, 8) and these reports show that both the test data and interview evaluations have satisfactory validity and predictive value. The present report concerns itself primarily with the problem of the reliability of the interview ratings used in the program.

PREVIOUS STUDIES

The personal interview has probably been the most widely used method for appraising the back-

¹ The opinions or assertions contained in this paper are those of the authors and are not to be construed as official or as reflecting the views of the U. S. Coast Guard.

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ground, qualifications, personality characteristics, and sources of difficulties of a wide variety of applicants, candidates, and patients. While the term is used to refer to a large variety of techniques and methods there appear to be at least two invariable characteristics: (1) face-to-face discussion and questioning between two or more people and (2) an attempt upon the part of one or more persons at the conference to appraise various characteristics of another person or to arrive at some interpretation of his behavior and characteristics. If the interview procedure is highly standardized it becomes an oral personality questionnaire or test. Such a highly standardized interview procedure should be more reliable than the informal or flexible interview, since the answers are short, concrete, and relatively easy to evaluate. However, when the interview procedure is used, the interviewer is usually seeking the sort of information which the highly standardized interview is unlikely to yield. On the other hand, if the interview is informal and casual, it may be productive of information, but it tends to lose objectivity and reliability. These difficulties, especially the reliability problem, are not recognized by many laymen who continue to use the interview and to assume both its validity and reliability. Various technically trained persons, though, have commented either on the inadequate evidence concerning interview reliability, or on the rather low reliability the interview method usually yields. Bingham and Moore (1) refer to an early study by Scott, Bingham, and Whipple (15) which produced rather disappointing results with respect to the reliability of the interview for employment purposes. The frequently quoted study by Hollingworth (9) also showed marked inconsistencies among the interviewers.

Symonds (*17*) stated in 1931, "Statistical evidence of the reliability of interviews is almost non-existent." Clark (*5*) reported correlations of .66 and .73, respectively, between grade point averages estimated by two interviewers and obtained grade point averages. The study contained no real measures of interview reliability, but the validity was high enough to reflect favorably upon reliability. Smeltzer and Adams (*16*) compared the effectiveness of graphic and narrative techniques of recording interview results. In the narrative method, the interviewer wrote his impressions of the applicant and then gave him a numerical rating from 1 (high) to 5 (low). In the graphic method a rating scale was filled out for the applicant and a rating from 1 to 5 was assigned. Actual reliabilities are not given, but when the original reports with the numerical marks deleted were re-rated by new judges and by the same judges, the second ratings deviated more frequently for the narrative form of report than for the graphic form of report. Hovland and Wonderlic (*10*) developed a standardized interview blank covering work history, family status, social history, and personal history. The blank was filled out by the interviewer who asked standard questions. When the administration of the blank was repeated by two different interviewers for 23 cases, the obtained reliability was .71. Odd-even corrected correlations for the parts of the blank and the total blank (100 cases) were as follows: work history, .57; personal history, .46; family history, .25; social history, .25; total blank, .82. It should be pointed out that the interview-reinterview reliability coefficient was considerably lower than the stepped up odd-even correlation for the entire blank. The reason for such a difference cannot be stated on the basis of the data given, but it is possible that the Spearman-Brown formula may not be applicable to the determination of the reliability of this kind of material. Fearing and Fearing (*7*) have reported data for a four-man interviewing board in the selection of police officers. A rating scale covering nine traits and a summary evaluation was used. The total oral grade was a weighted average of the ten parts of the rating scale. All the possible inter-correlations between different interviewers on each trait and for the total oral grade were computed. The mean inter-correlations between the four judges on the 10 separate traits ranged from .23 to .48. For the summary evalua-

tion rating the mean correlation was .48 with a range of .33 to .57. The mean inter-correlation for the total oral grade, based on all ten parts of the rating scale, was .59 with a range of .41 to .72. It should be pointed out that although the interviewers sat as a board and all of them had some common information on the interviewee's background, these obtained correlations are still below the desirable reliability of many ability and personality tests. This finding indicates the difficulty of obtaining complex evaluations which are consistent. Porter (*13*) reported a study in which 13 judges used a check list to rate 19 interviews recorded phonographically and by type-script. The present authors have not been able to gain access to the original article but the abstract (*14*) comments, "Evidence of reliability and validity in the use of the check list was satisfactory." Child (*4*) used the interview method to secure data from second generation Italians on Italian background, adherence to Italian culture, and identification with the Italian group. Standardized questions were used and each response was rated on a five point scale (ranging from Italian adherence to American adherence). Odd-even correlations on the three scales, in the same order as listed above, were .66, .18, and .70; when stepped up by the Spearman-Brown formula, these correlations became, respectively, .80, .31, and .82. Dodd (*6*) repeated an opinion poll and found that the results for the total group agreed very closely in each case but that only 75 to 80 per cent of individuals gave the same response twice. No correlational reliabilities were presented. King (*11*) used an interview schedule for a polling of attitudes concerning relief problems. There were 12 main problems containing 15 points, and the answers were recorded by the multiple choice method. The final study involved 25 matched interviews by two separate interviewers involving the same respondents. The agreement on the various questions ranged from 60 per cent to 100 per cent. Nine out of the 15 questions showed over 80 per cent perfect agreement. No correlational results were reported. Mosteller (*12*) reported some data covering the procedures of the Office of Public Opinion Research. These data support the point made above that questions requiring relatively simple, concrete answers usually yield higher reliabilities than questions requiring the interviewer to make evaluations. In these studies the same

respondents were reinterviewed either by the original interviewer or by a second worker. For the relatively simple estimate of age in 10-year groupings, the same interviewer had a reliability of .97, with 90 per cent identical classifications, while estimates made by two different interviewers correlated .91, with 71 per cent identical classifications; (many interviewers merely asked the respondent his age). A question on car ownership, to be answered on a "Yes" or "No" basis, yielded 96.5 per cent agreement when repeated by the same interviewer and 86 per cent agreement between two different interviewers (no r 's reported). Two different interviewers obtained 87 per cent identical responses to a question concerning telephone ownership and the same percentage of identical responses to a question on how the respondent voted in the last presidential election. The relatively more complex task of classifying the economic status of respondents on a five point scale yielded a correlation of .79 between the same interviewer's ratings on two different occasions, with 77 per cent identical classifications. The economic status classifications made by different interviewers correlated .63, with 54 per cent identical classifications. It should be pointed out that the classification of economic status on a five point scale is still a much less complex evaluation than the interviewers' evaluations of the potentialities of officer candidates which were made in the present study.

In summary, it may be said that during the last decade or so, there have been attempts to modify interview procedures in such a manner as to obtain quantitative data from the interview and to increase its reliability. In this connection, the work of Hovland and Wonderlic (10) and of Child (4) may be singled out for mention. However, the usual findings have pointed to the relatively low reliability of the interview, and there is need for much work on the development of interview procedures. The present study describes an interview procedure and gives evidence on its reliability.

METHODS AND PROCEDURES

The fundamental purpose of the medico-psychological program has been that of evaluating the ability of officer candidates to complete the training program and their fitness for assuming the duties and responsibilities of commissioned officers. Dur-

ing most of the time the program has been in operation the personnel has consisted of both psychologists and psychiatrically trained medical officers. During this time every effort was made to secure independent psychological and psychiatric interviews of each candidate. These interviews were conducted separately by the psychiatrist and the psychologist in different rooms. Interviews were made successively on the same day. Half of the candidates were interviewed first by the psychiatrist, and half were interviewed first by the psychologist. The length of the interview varied from ten to twenty minutes with different kinds of candidates. The interview was always conducted with all ability and personality test scores as well as the Personal Data Questionnaire (a background measure) at hand. After some experience was gained with CRCs, three aptitude measures (quantitative, verbal, and spatial) were combined in standard score form, and an actuarial table based on these combined scores was developed. This table indicated the probability of success or failure at each score level and was available to the interviewer.⁴ In other words, each interviewer had at hand, before the interview, the same material concerning the abilities and background characteristics of the candidates. Furthermore, during the developmental stages of the program, the psychologists and the psychiatrists discussed at length the desirable and undesirable attributes to be considered, and arrived at substantial agreement on the characteristics to be evaluated. While the highly standardized, rigidly inflexible type of interview was not used, a similar pattern of questions was utilized in a fairly informal manner by each interviewer. Immediately after each interview the interviewing officer prepared a brief (50-200 words) report of his findings and impressions and assigned an over-all rating from a low of 1 to a high of 5. Since intermediate pluses and minuses were used, the interview rating scale was one of 13 steps. In this report the interview scale will be handled as one of 13 steps with a low of 1 and a high of 13.

It should be stressed that the evaluation made as a result of these interviews was an extremely complex one. Speaking broadly, there were at least

⁴ Such a table was never used with SPARS, but the interview reliabilities obtained with this group were comparable to those obtained with CRCs.

four major bases of evaluation involved: (1) the candidate's ability to pass academically, (2) the candidate's ability to display satisfactory officer-like qualities during training, (3) the candidate's ability to withstand the psychological pressures and tensions of the training program, and (4) the candidate's ability to withstand the psychological trauma of combat. Put in other words, the interviewing officer faced the problem of making an over-all evaluation which reflected at least the following factors: abilities, physical appearance, bearing, forcefulness, poise, animation, verbal facility, thought organization, relevant attitudes and interests, tact, emotional stability, social adjustment, and psychoneurotic traits. The psychological and psychiatric interviews were made independently, but the officers concerned always consulted afterward and minor adjustments of one or both ratings would be made in a few cases upon the basis of adequate cause. These changes merely reflected the effort to make the final evaluation of a candidate as complete and valid as possible. Although the bases of the evaluations were admittedly complicated, the investigators were impressed early in the program with the correspondence of their independently assigned interview ratings.

To check the actual reliability of the independent interview ratings, a record was kept over a period of time of the original, unchanged interview ratings assigned by the psychiatrist and the psychologists. The reliability coefficients presented in this study represent correlations between two independent judgments which have been quantitatively expressed. The data cover 399 CRCs and 137 SPARs. Since only one psychiatrist was assigned to the program during this period the two psychologists alternated daily in working with him. Each candidate, therefore, had one interview rating from the psychiatrist and another rating from one of the psychologists. For the sake of convenience, the psychiatrist will be identified hereafter as interviewer I-A; the psychologists as interviewer I-B and interviewer I-C.

RESULTS

Table 1 presents the Pearson product moment correlations between the interview ratings for the CRCs and SPARs. The correlations labeled I-A vs. I-B and I-C represent the pairing of the psychi-

atrist's rating of each candidate with the corresponding rating assigned by one or the other of the psychologists. The table also shows the separately computed correlations between the ratings of each of the psychologists and those of the psychiatrist (I-A vs. I-B and I-A vs. I-C). Since each interviewer had at hand the same test scores, these correlations represent to some degree the similar interpretation of similar data by two different people. However, the correlation between the average of the three combined test scores and the average of the psychologist's and psychiatrist's combined interview ratings based on CRC data only is only $.65 \pm .017$

TABLE 1
Product Moment Correlations of Interview Ratings

INTERVIEWERS	CRCs	SPARs
I-A vs. I-B and I-C.....	$.830 \pm .011$ N = 399	$.850 \pm .016$ N = 137
I-A vs. I-B.....	$.812 \pm .017$ N = 192	$.800 \pm .031$ N = 61
I-A vs. I-C.....	$.851 \pm .013$ N = 207	$.888 \pm .016$ N = 76

(N = 498), significantly lower than the inter-correlation of the interview ratings. The size of this correlation is influenced, of course, by the fact that the interpretation of the test scores entered into the interview ratings. It does indicate that the rating was not a mere reflection of the test scores, but it would be incorrect to try to infer from the size of the correlation the role played by the test scores in determining the interview rating.

The correspondence of the interview ratings can also be expressed in terms of the degree of difference between the two ratings given any one candidate. Since there are 13 different possible ratings, any one candidate's two ratings may be identical (zero difference), or they may vary by as much as 12 ratings or steps. Tables 2 and 3 show separately for CRCs and SPARs the number of times each possible degree of difference occurred. These tables also show the percentage and cumulative percentage of cases represented at each possible level of difference. Finally, the last two columns of each table show the percentage and cumulative percentage of

difference that can be expected at each level by chance alone.

TABLE 2

*Frequency of Occurrence of Each Possible Degree of Difference of Interview Ratings for CRCs
(I-A vs. I-B and I-C)*

DIFFERENCE IN NUMBER OF STEPS	NUMBER OF CASES	CUMULATIVE NUMBER OF CASES	PER CENT OF CASES	CUMULATIVE PER CENT OF CASES	CHANCE	CUMULATIVE CHANCE
					per cent	per cent
0	145	145	36	36	8	8
1	115	260	29	65	14	22
2	85	345	21	86	13	35
3	35	380	9	95	12	47
4	15	395	4	99	11	57
5	3	398	0.75	99	9	67
6	1	399	0.25	100	8	75
7					7	82
8					6	88
9					5	93
10					4	96
11					2	99
12					1	100
Total ..	399					

TABLE 3

*Frequency of Occurrence of Each Possible Degree of Difference of Interview Ratings for SPARs
(I-A vs. I-B and I-C)*

DIFFERENCE IN NUMBER OF STEPS	NUMBER OF CASES	CUMULATIVE NUMBER OF CASES	PER CENT OF CASES	CUMULATIVE PER CENT OF CASES	CHANCE	CUMULATIVE CHANCE
					per cent	per cent
0	31	31	23	23	8	8
1	59	90	43	66	14	22
2	37	127	27	93	13	35
3	7	134	5	98	12	47
4	3	137	2	100	11	57
5					9	67
6					8	75
7					7	82
8					6	88
9					5	93
10					4	96
11					2	99
12					1	100
Total ..	137					

For the CRCs, Table 2 shows that the modal degree of difference between the two interview ratings

is zero (i.e., identity). For SPARs, the modal degree of difference between the two ratings is one step (Table 3). About 95 per cent of the CRC interview ratings differ by no more than three steps, while about 98 per cent of the SPAR interview ratings are within three steps of each other. None of the CRC interviews differ by more than 6 steps on the 13 point scale. The SPAR interview ratings never differ more than 4 steps. These tables exhibit the close agreement between the interview ratings of the psychiatrist and the psychologist.

TABLE 4

Locus of Complete Agreements

1. INTERVIEW RATING COMBINATIONS	2. FREQUENCY OF OCCURRENCE	3. PER CENT OF ALL COMPLETE AGREEMENTS	4. NUMBER OF CASES RECEIVING AT LEAST ONE RATING AT EACH LEVEL	5. PER CENT COL. 2 OF COL. 4
1 and 1	64	44	100	64
2 and 2	4	3	49	8
3 and 3	9	6	57	16
4 and 4	17	12	99	17
5 and 5	13	9	81	16
6 and 6	13	9	72	18
7 and 7	7	5	62	11
8 and 8	9	6	62	15
9 and 9	4	3	31	13
10 and 10	5	3	26	19
11 and 11	0	0	9	0
12 and 12	0	0	2	0
13 and 13	0	0	3	0
Total	145			

The final problem is the locus of the various degrees of difference. In other words, it is necessary to determine whether or not agreement is more likely at the lower end of the scale, the middle of the scale, or the upper end of the scale. Table 4 treats the perfect agreements between the psychiatrist and both psychologists for CRCs. Column 1 lists each possible perfect agreement combination. Column 2 shows the number of times agreement occurred at each level. Column 3 shows the percentage of all perfect agreements that occurred at each level. Column 4 shows the number of candidates that received either one or two interview ratings at the indicated level, and Column 5 shows the percentage of all candidates who received one or two interview ratings at each level who received two such ratings.

Tables 5, 6, and 7 are constructed in the same manner as Table 4 and treat, respectively, differences of one, two, and three steps. These tables indicate that perfect agreement is most likely to occur at the

TABLE 5
Locus of One Step Differences

1. INTERVIEW RATING COMBINATIONS	2. FREQUENCY OF OCCURRENCE	3. PER CENT OF ALL ONE STEP DIFFERENCES	4. NUMBER OF CASES RECEIVING AT LEAST ONE INTERVIEW RATING AT EACH LEVEL	5. PER CENT COL. 2 OF COL. 4
1-2	15	13	134	11
2-3	12	10	94	13
3-4	14	12	142	10
4-5	21	18	159	13
5-6	13	11	140	9
6-7	13	11	121	11
7-8	10	9	114	9
8-9	7	6	86	8
9-10	7	6	50	14
10-11	2	2	33	6
11-12	1	1	10	10
12-13	0	0	5	0
Total ..	115			

TABLE 6
Locus of Two Step Differences

1. INTERVIEW RATING COMBINATION	2. FREQUENCY OF OCCURRENCE	3. PER CENT OF ALL TWO STEP DIFFERENCES	4. NUMBER OF CASES RECEIVING AT LEAST ONE INTERVIEW RATING AT EACH LEVEL	5. PER CENT COL. 2 OF COL. 4
1-3	11	13	146	8
2-4	10	12	138	7
3-5	6	7	132	5
4-6	13	15	158	8
5-7	13	15	130	10
6-8	12	14	122	10
7-9	8	9	85	9
8-10	8	9	80	10
9-11	1	1	39	3
10-12	0	0	28	0
11-13	3	4	9	33
Total ..	85			

lowest interview rating. In the case of the one, two, and three step differences, no marked modality of agreement occurs at any point. The fact that a large number of the perfect agreements involved the lowest interview ratings might indicate

undue severity on the part of all interviewers. However, it should be noted that the course was a difficult one and had a relatively high failure rate. From 75 to 100 per cent of all persons receiving the lowest interview rating in various classes eventually failed the course.

TABLE 7
Locus of Three Step Differences

1. INTERVIEW RATING COMBINATION	2. FREQUENCY OF OCCURRENCE	3. PER CENT OF ALL THREE STEP DIFFERENCES	4. NUMBER OF CASES RECEIVING AT LEAST ONE INTERVIEW RATING AT EACH LEVEL	5. PER CENT COL. 2 OF COL. 4
1-4	9	26	190	5
2-5	6	17	124	5
3-6	3	9	126	2
4-7	6	17	155	4
5-8	6	17	137	4
6-9	2	6	101	2
7-10	2	6	86	2
8-11	1	3	70	1
9-12	0	0	33	0
10-13	0	0	29	0
Total ..	35			

DISCUSSION AND INTERPRETATION

The results reported above indicate that in spite of the complex evaluations which are necessary, quantitative interview ratings may be obtained with reliabilities as high as those of most personality tests; higher, in fact, than the reliabilities of many such tests. One of the reliabilities reported for SPAR interview ratings (I-A vs. I-C, Table 1) is nearly as high as the acceptable reliability of aptitude tests. It should be stressed that no claim is made that interviews are inherently reliable. Rather, the point is that interviews can be made reliable if (1) adequate, relevant, and objective information concerning the candidate is available to the interviewer, (2) the demands of the situation with respect to which the interview is made are carefully defined and fully understood by all interviewers, and (3) the interviewers have consulted with each other and have arrived at common standards and criteria of evaluation. It is contended that interview ratings can be both valid and reliable when the above listed requirements are satisfied. It should, however, be immediately obvious that

these requirements demand interviewers who are well trained in the following respects: (1) interpretation of test data, (2) evaluation of background and personal history factors, and (3) evaluation of personality characteristics and psychoneurotic traits. Further, it is contended that the background and training of the interviewers should be broad and extensive so that judgments will be mature and sophisticated. The interviewer must be able to integrate all the information and data available for the candidate without giving undue weight to any one factor, or to irrelevant or extraneous matters.

SUMMARY AND CONCLUSIONS

Data on the reliability of independent interviews of officer candidates by a psychiatrist and one or the other of two psychologists are reported. The data cover 399 candidates for reserve commissions (CRCs) and 137 SPAR officer candidates. After each interview the interviewing officer wrote a brief (50-200 words) report of his findings and impressions, and also assigned an over-all rating. The basis of judgment was complex and involved evaluation of several characteristics. The product moment correlations between the quantitative ratings made by the independent interviewers based on all the data are $.83 \pm .011$ for CRCs and $.85 \pm .016$ for SPARs. The interview ratings for SPARs made by one of the psychologists correlated $.888 \pm .016$ ($N = 76$) with the psychiatrists' ratings of these candidates. Tables showing the frequency of occurrence of each possible degree of difference are presented. For CRCs, the modal degree of difference between the two interview ratings given each candidate is zero (i.e., identity); for SPARs the modal degree of difference between two ratings is a difference of one step. Tables showing the locus on the interview scale of perfect agreement and of one, two, and three step differences are presented for the CRC data. Perfect agreements are most likely to occur at the level of the lowest interview rating. In the case of one, two, and three step differences no marked modality of agreement occurs at any point. It appears reasonable to conclude that with well-trained interviewers working under carefully defined conditions, quantitative interview ratings representing a complex over-all evaluation can be

made as reliable as most personality tests, and more reliable than many of them.

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THE PERSONNEL CONSULTANT AND PSYCHOLOGICAL TESTING AT ARMED FORCES INDUCTION STATIONS¹

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NUMEROUS articles have appeared in various journals describing the work of the Personnel Consultant (Military Psychologist) in the Armed Services (2, 3). At no time, however, has there been a review of the psychological testing in Armed Forces Induction Stations. Atwell and Bloomberg in 1941 wrote about psychometrics at an induction center (1), but this was when Personnel Consultants were not utilized at these installations and the testing program was in its initial stages of development.

On 1 August 1942 Psychological Examiners (civilian psychologists) were assigned to Armed Forces Induction Stations for the purpose of accepting for military duty registrants who were capable of absorbing military training at the normal rate and of excluding those who lacked the necessary mental ability. Since many of the civilian psychologists were available only temporarily, later in 1942 about a hundred Personnel Consultants (Military Psychologists) were commissioned in the Army Specialist Corps and later in the Army of the United States (Adjutant General's Department). To each Personnel Consultant were assigned enlisted personnel, trained, if possible, in educational, clinical, vocational, or industrial psychology. This paper is a brief review of the psychological testing carried on by the Personnel Consultants and their staffs in Armed Forces Induction Stations during the war.

At first, in order to discriminate between registrants who were suitable for military service even though they could not read well enough to meet previously established standards (4th grade level)

and registrants who were not suitable even though they could read, a screening interview was used. The interview determined those to whom tests for illiterates should be given and those who were literate and in need of no further testing. Standards of literacy were not stated, experience at the local induction station being expected to elicit standards most appropriate for that region. However, the following criteria for literacy were suggested: (1) educational level in relation to chronological age, i.e. completion of four years of school without more than one year retardation; and (2) occupational history with reference to type of occupation, average wage, and length of time in one job. Although this subjective method of selecting literates put a considerable burden on each psychologist and could not lead to uniform results, the use of psychologists for implementing the selection process led to a better uniformity than had previously been found in Army recruiting stations.

In addition to selecting literates, the psychologist also had to determine which illiterates were acceptable for service. To aid him in this task, several tests were developed by the Adjutant General's Department. The Visual Classification Test, a non-language, group test, was administered to all illiterates. This test was made up entirely of pictures, a minimum of language was used in the directions, and although the items covered a wide range of difficulty, the lower end of the range was emphasized. When only a few illiterates were being tested or when it was felt that the group test did not indicate the registrant's ability, a battery of individual tests was administered. This battery included the Wells Concrete Directions Test in which commonly used tools were arranged in accordance

¹ The opinions and assertions stated in this article are those of the authors and are not to be construed as reflecting the official attitude of the Army of the United States.

with oral directions, and the Block Counting Test in which the number of blocks in pictorial piles of them were counted (4). A critical or passing score was established for each test, and registrants failing to make a passing score were recommended to the Commanding Officer for rejection for military service.

Near the end of 1942 the Army Information Sheet was introduced as the criterion for literacy. Registrants who had not completed the seventh grade, and other special cases, were given this test. It was composed of twelve items, including the writing of the registrant's name, address, and age, and five questions based on paragraph reading. Anyone who had less than nine items correct was given the tests for illiterates already described. The introduction of this minimum literacy test was a definite step toward standardizing the differentiation between literacy and illiteracy.

Experience, however, proved that completion of seven school grades was not a sufficiently standard criterion since credit for school grade achievement varied from place to place. Because the Army Information Sheet was found to have too narrow a range of scores for so wide a range of school grade levels, it was replaced in June 1943 by the Mental Qualification Test. This seventeen-item, written, verbal intelligence test was given to all registrants who were not high-school graduates. Those failing to attain the critical score were given the tests for illiterates already described.

At this time also the critical scores on all tests were revised so that about three-fifths of the potential "Grade V" registrants (poor learners) would be rejected for military service. The broadening of the testing program to include all non-high-school graduates, the improved literacy test, and the revision of the critical scores increased the volume and importance of the Personnel Consultant's work. In addition, instead of merely "recommending" that a registrant be rejected for failure to meet the minimum intelligence standards, the Personnel Consultant could "reject" a registrant, and the man could not be inducted into military service.

In June 1944 another battery of tests was introduced into the induction station program. The purpose of the new screening program was both to identify and reject registrants who did not possess sufficient ability to acquire the minimum military

skills and to identify and accept registrants who would require special educational and military training. This latter group was sent to a Special Training Unit to prepare them to complete the regular Army training program or to make it clear that they should be discharged.

The new tests were better standardized and validated than any previously used. They were selected from a group of some thirty-five tests which were tried out, revised, and tried again. Standardization was carried on at several different installations, including induction stations, throughout the country. The validation of these tests was effected through several measures of evaluating success in basic military training, the most practicable of which were ratings by training cadre.

The Mental Qualification Test was continued in use as the basis for separating literates who were acceptable as such from the illiterates who would require further testing to determine their potential ability to profit from military training. However, at this time the critical score for determining literacy was slightly raised to insure a higher percentage of registrants who could succeed in the regular military program with special training.

The Visual Classification Test was replaced by the Group Target Test, the purpose of which was to screen all men who failed the Qualification Test. The three parts of the Group Target Test—memory for motion patterns, sense of direction, and spatial orientation—simulated to some extent the military training steps of preparation, explanation, demonstration, application, and examination. Ability to understand spoken English was not required. A registrant exceeding the critical score was accepted as an illiterate with sufficient ability to succeed in military training.

At this time, also, the Individual Examination was introduced for English-understanding registrants who failed the Group Target Test. Part I of the Individual Examination simulated marching in that the examiner counted a specified cadence as the registrant "marched" crayons up increasingly difficult pathways. Part II contained various performance items, such as patterns to be made from blocks, or drawn from memory, and problems of identification.

Another new test, the Non-Language Individual

screening, was introduced in this battery. This test was intended for Non-English understanding men only. It consisted of pictures in which the registrants drew a line connecting two things that were alike or most nearly alike. All directions were given in pantomime.

The separate tests described above were not employed as individual measures but rather as a screening battery in the induction station program. With the introduction of this new battery of tests, progress in test construction and validation was noticeable, since the correlation of these tests, individually and as a battery, with soldier proficiency was sufficiently high to make a better and more accurate selection of illiterate registrants for military training. To a greater degree than before, subjective judgment gave way to scientifically constructed tools correlated with objective criteria of performance. The Personnel Consultant was supplied with additional enlisted and civilian personnel trained in psychology to aid him in the increased responsibilities connected with the new testing program. Progress was definitely noted over the days when the Personnel Consultant either worked alone or made use of whatever enlisted personnel

he could obtain. The Personnel Consultant could now accurately select registrants who were potentially capable of absorbing military training and in like manner reject those who lacked the necessary abilities by using his personnel properly to administer, proctor, score, and interpret the new test battery.

As the induction station psychological testing and selection program continued to function during the war, it took on added significance in its relation to the examination of registrants for military service. The Personnel Consultants and their staffs have always been considered an integral part of the induction stations and have functioned with prestige on a par with physicians and other professional personnel attached to these installations.

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UNDERGRADUATE TRAINING FOR GRADUATE STUDENTS OF PSYCHOLOGY

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WHAT knowledge is of most worth to the prospective graduate student of psychology? Is any training indispensable? What is important? These are the questions which confront the adviser of the potential graduate student, and are of even greater importance to graduate faculties of psychology. These latter psychologists are in a unique position for evaluating the various types of preparation which come to them, and consequently the writer directed letters of inquiry along these lines to nine university departments which do substantial amounts of graduate training. It was suggested that the intellectual quality of the student be taken for granted as adequate and that the discussion should be kept to matters of knowledge and training. Five of the institutions represented were private universities and four were publicly supported.

No questionnaire was sent in order to allow as much freedom as might be desired for the expression of various shades of opinion. The analysis of the replies was begun by tabulating the frequency with which various types of training were mentioned as required, highly desirable, described in some other way, or ignored. Other comments were then taken into consideration, and out of this complex, the writer attempted to discern significant factors. The results are not offered as a quantitative study of requirements, but as the writer's interpretation of the desires of nine graduate departments, expressed through their chairmen. None of the chairmen was told that his opinions might eventually form the basis of a publication, for the writer had no such expectation at that time. Consequently it would be unfair to name them or hold them responsible for the interpretations made. The general trends of the replies were so striking, however, that a summary for the profession in general seems highly desirable. In the opinion of the writer, a strictly quantitative study of requirements would have proved relatively sterile, for precise requirements

are not characteristic, ". . . principally because the varied nature of undergraduate work would make it impossible to follow any definite requirements," as one writer put it. What follows might be described, then, as wishful thinking which may become a reality in due course of time, with some gratuitous comments by the writer.

Amount of Psychology. Only three of the nine institutions definitely stipulated a major in psychology, and only two others required as much as a minor. Another states: "Of course, we would like to have students have a major in psychology, but this is not a fast requirement." In general there is little interest in "a long list of courses." One department which requires a major adds the following comment: "The main defect we have found in beginning graduate students, both in the case of those from our own institution and those who come from other colleges, is a lack of breadth of educational experience. In particular they have been weak in mathematics and both the natural and social sciences. We would prefer to have a student who has had a thorough education in this field to one who has concentrated in the single field of psychology." It is fairly probable that a student without a complete major would be admitted to any one of the nine graduate departments of psychology provided there were other evidences of fitness. One department requiring a major definitely states that if an applicant does not satisfy this requirement, "he may register for a longer period to cover this deficit." There is no tendency to decry courses in psychology, but they certainly are not desired at the expense of both a general education and training in particular areas which will be treated in the next paragraph.

Studies Urgently Recommended. In this category fall mathematics and natural science. Seven of the nine departments recommend at least a year of college mathematics, and two of these seven require it. One of those which does not mention college mathematics does urge statistics. The pressure for

science is equally strong, or even stronger, if one considers the amount of time recommended to be spent in this field. No particular science is singled out as indispensable. A common sort of statement is "one year at least of college work in two of the following subjects: chemistry, biology, physics." Another writer finds "the best bets are . . . students with undergraduate training in physical science and mathematics . . . and students whose undergraduate training is in the biological sciences. . . . They already know what science is, and they already know how to think." One of the institutions which does not require mathematics has "just petitioned the Arts College faculty to be allowed to substitute a senior college prerequisite in mathematics for the prerequisite in language." There can be no question of the desire of the graduate departments of psychology for strong backgrounds in mathematics and natural science.

The Social Sciences. The social sciences definitely rank below the natural sciences as background for graduate work in psychology in the opinions of the departments surveyed. Three departments accorded an equality of status to the social sciences by placing them in the list of recommended or required subjects which also contained the natural sciences. On the other hand, one writer feels strongly that majors from the "talky" subjects, "English, sociology, politics, and other subjects involving much reading, talking, and discussion with little incisive thinking and little if any laboratory work," are poor bets. "Occasionally a student of this type becomes a scientist but such a student is rare. Most of them stay with the descriptive aspects of the subject, and they continue to dodge the scientific aspects of psychology." Other writers do not mention the social sciences—an omission which is significant in view of their strongly expressed interests in mathematics and the natural sciences. There is obviously a strong tendency to identify psychology with the natural rather than the social sciences.

Language Requirements. These are conspicuous for lack of comment. Perhaps it is assumed that the usual language requirements will be met, but no reply mentioned languages either as a "must" or a "desirable," except as one pamphlet of a graduate school listed them among general requirements. The department which was previously quoted as trying to secure the substitution of an undergraduate

mathematics requirement for the existing one of language, recognizes that the proposal has implications for the graduate school. "We are keeping our fingers crossed on that score, and are urging the Graduate School to appoint a committee to reconsider the present rule prescribing modern languages for psychologists." Advisers of undergraduates who are potential graduate students in psychology should not be misled by this apparent lack of interest in languages, however, for it is highly probable that the usual graduate school requirements will be applied. In other words, modern languages may not be essential or even highly desirable tools, but they are a "must" which will be enforced more rigidly by the graduate school machinery of requirements than will be the strong desires of graduate departments of psychology for more mathematics and science.

Preferred Subjects in Psychology. Only four writers of the nine discussed this problem. Their preferences were for experimental and statistics, with one strong plea for a knowledge of systems, or a system of psychology. One expressed preference for experimental and statistics is immediately followed by this qualification: "Actually we are more interested that the students complete certain foundation courses in science outside the department. . . ." Probably all writers take for granted a course in general psychology as a part of the background of every student, but there is little mention of it.

The final criterion of the worth of any undergraduate preparation is the success of the graduate students. In this connection, three thoughtful paragraphs describing the observations of one graduate department deserve quotation in full.

There is a second criterion to be considered: what does a student need in order to do good work? Certainly statistics; and most of our group say experimental methodology. We have, however, sought to build up numerous strong sub-departments within the department (animal, clinical, child, personality) and it is my own observation that students do excellent work in these sub-departments without any essential core of preparation other than general psychology and statistics.

A third criterion is involved when we ask what a student needs to know in order to hold his own

in his contacts with other students. Here again statistics is conspicuous. The status of a student who cannot argue in terms of statistics is definitely low. In competition with other students one also needs a psychological credo (Gestalt, Lewin, Hull, Tolman, Freud). And obviously, in order to defend himself, the student has to have some knowledge of other systems. So a knowledge of "systems" is a pragmatic requirement for attaining status as a student.

You see then that our theories and practices are not consistent. The only absolute essential from every point of view is advanced statistics. After that, ranked according to my own opinion of their usefulness to students: (1) a thorough knowledge of some one "field"; (2) "systems"; (3) "experimental". A casual survey of the twenty-odd bona fide graduate students now here confirms me in the opinion I have expressed. The ones who are doing best meet all the requirements I have mentioned and those who lack some of the requirements are handicapped more or less according to the suggested weightings of the requirements. It irks me to put experimental method at the bottom of the list, but that is where it seems to come.

Undesired Students. Aside from the student of inferior intellectual quality, there is a desire to discourage maladjusted students who are really seeking help for themselves. Only two letters mention the need to eliminate such students, but both are strong, e.g., "I am always appalled at the number of persons whose apparent main reason for going into psychology is based on their own adjustment difficulties." No doubt this sentiment would find ready acceptance among writers who did not express it. Probably the lack of objective ways of dealing with this problem makes most departments reluctant to take any action. The criticism which one writer makes in this connection,

"...I think that psychologists have not done an effective job of selection at the graduate student level" is one which ought to be a challenge to the profession.

Speculation. These data arouse some very interesting questions as to the directions of development which psychology has taken and is taking. What is the meaning of the urge for mathematics and natural science? Are they a means of selection? Do these subjects offer large transfer values to psychological method? Affirmative answers to both questions are implied in the comment, "They (students from mathematics and natural science) already know what science is, and they already know how to think." If we push the question of transfer, and ask whether this transfer is equally great to all areas of psychology, (e.g. child study, personality, clinical, and social, as well as to laboratory investigations) then the almost unanimous endorsement of mathematics and science forces us to assume that the writers of these replies believe that there is a substantial amount of transfer to all areas. *This further implies a considerable amount of unity within the sprawling field of psychology with respect to methods of investigation and study*, a proposition which is worth all the debate it has occasioned or will produce. Opponents of this view will probably retort that the data merely show that experimentalists are in the saddle at these institutions and are dictating which direction the horse shall go. Certainly the direction seems to indicate an intense interest in objective and quantitative methods. If this direction is followed far, what will be its effect upon fields of psychological study which have, up to now, been much less open to these approaches? Will they be abandoned, restricted, or, on the contrary, be still further enriched and clarified? Certainly we can expect some impact upon these fields from the demands of graduate departments of psychology for emphasis upon the natural sciences and mathematics.

THE GROWTH OF STUDENT INTEREST IN PSYCHOLOGY

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AND

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IT IS generally recognized that psychology as an academic subject has grown in popularity among undergraduate students during the past twenty years. One evidence of this growth is to be found in an examination of the number of students electing psychology in their undergraduate program. Another indication is to be found in the number of students who elect psychology as a subject for major concentration. The latter type of evidence, used as a measure of student interest, has the advantage of excluding students who take psychology in order to fulfill requirements in other curricula such as education, sociology, etc.

The present study reports the steady growth in the number of students choosing psychology as a major subject at the University of Illinois during the period from 1925-1944. The period selected as a basis for study included an economic boom, economic depression, and war, all of which are known to influence the size of student populations.

In the general curriculum of the College of Liberal Arts and Sciences at the University of Illinois, "each student, before beginning the junior year, selects one subject and declares it to be his major. In order to be acceptable for graduation, a major must consist of at least twenty hours in courses chosen from those designated by a department and approved by the faculty of the college. Such courses are to be inclusive of some distinctly advanced work and exclusive of courses open to freshmen."¹ The following courses² are acceptable majors:

Bacteriology	Classics
Botany	Economics
Chemistry	English

¹ *University of Illinois Annual Register, 1943-1944*, p. 135.

² For purposes of comparison in this study, Greek and Latin have been combined into a single department of Classics, while Italian and Home Economics have been excluded.

Entomology	Mathematics
French	Philosophy
Geography	Physics
Geology	Physiology
German	Political Science
Greek	Psychology
History	Sociology
Home Economics	Spanish
Italian	Speech
Latin	Zoology

Each semester the College of Liberal Arts and Sciences compiles a register of junior and senior students with their major subjects. In order to

TABLE 1
Majors in Psychology in the General Curriculum of the College of Liberal Arts and Sciences, University of Illinois, 1925-1944

YEAR	NUMBER	PER CENT OF ALL MAJORS*
1925	11	1.3
1926	13	1.3
1927	14	1.6
1928	22	2.4
1929	27	2.4
1930	33	2.8
1931	35	3.4
1932	41	4.2
1933	27	2.9
1934	30	3.0
1935	43	4.4
1936	42	3.8
1937	56	4.7
1938	68	5.4
1939	67	5.6
1940	66	5.2
1941	66	5.4
1942	69	7.1
1943	65	11.8
1944	84	13.1

* The percentage column shows the percentage of all majors in the General Curriculum who majored in psychology.

avoid needless duplication, the lists compiled for the fall semester of each year have been used in this study. Experience has indicated that the data for the fall semester are representative of the data for the rest of the year.

Table 1 presents in column 2, the actual number of students who majored in psychology at the University of Illinois for each year from 1925 to 1944 inclusively. In column 3 these numbers are expressed as percentages of the total number of students

In 1925 psychology was fifteenth in importance as a major subject while in 1944 it was third, exceeded only slightly by sociology and English.

Figure 1 shows the percentage of all students in the general curriculum who majored in each of four selected departments. These departments were chosen in order to give some representative data with which to compare psychology. It may be seen that sociology and psychology enjoyed much the same growth, while history showed a rather

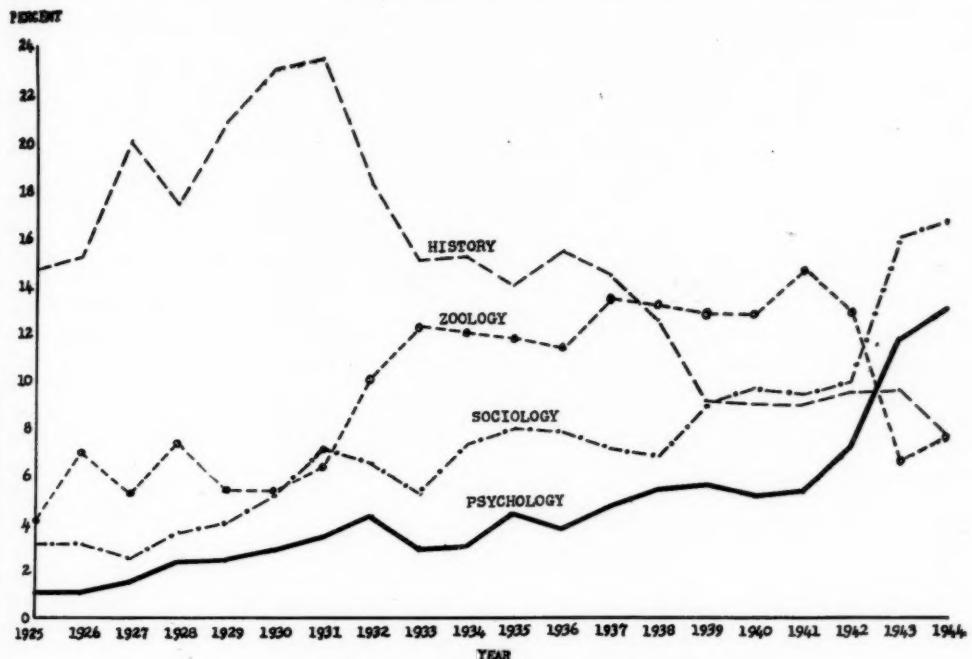


FIG. 1. PERCENTAGE OF STUDENTS MAJORING IN FOUR SELECTED DEPARTMENTS

majoring in the general curriculum of the College of Liberal Arts and Sciences each year. It may be seen from Table 1 that there has been a relatively steady increase in the number of students majoring in psychology from 1925 to 1943. In 1944 there was a marked increase in the number of such students. It may be seen further that whereas psychology was chosen as a major by about one per cent of the juniors and seniors in 1925, it was chosen by about thirteen per cent of these students in 1944.

steady decrease after 1931. Zoology has shown periods of growth, relative stability, and decline.

INTERPRETATION

The data presented above provide the basis for some interesting interpretations and speculations. To begin with, the data on majors present an indirect measure or index of student interests. The use of total student registrations within any department as a measure of student interests has the limitation that registration in many courses is

obligatory, e.g. foreign languages are required in most colleges of liberal arts and sciences as is a certain amount of English. Data on student majors as a measure of student interests do not suffer this limitation since the choice of a major may be considered voluntary.

On the other hand, data on student majors cannot be used uncritically as an index of student interests in a particular subject inasmuch as there are differences in the relative difficulty with which majors may be completed in different departments. For example, at the University of Illinois a student must complete the equivalent of one year of college mathematics before he can start to accumulate credit toward a major in mathematics, while in the department of psychology, a student need have only one semester of beginning psychology before starting a major. Other such departmental differences can be demonstrated. These differences in pre-major requirements undoubtedly influence the choice of majors of some students and thus limit the value of majors as a measure of student interests. In addition to this limitation, it may be that differences in the abilities required for different subjects have some influence on the student's choice of a major subject.

Despite these limitations, the choice of a major subject undoubtedly offers one of the best and certainly one of the most easily attained measures of student interests.

As to the possible reasons for the growth in popularity of psychology among students, several interrelated factors appear to be operating. There has been a decided expansion in the vocational opportunities for psychologists. The use of psychologists in industry, education, medicine, law, and institutions of public welfare has grown rapidly since the first world war. A reflection of the increased number of psychologists may be seen in the rapid growth of membership in the American Psychological Association during the past twenty years.

During the same period there has been a rather

marked change in emphasis within many departments of psychology from a predominantly academic orientation to a predominantly applied one. This transition may be observed by an inspection of the changes in course offerings of many departments of psychology. Such a change is undoubtedly due in part to the increased demand for applied psychologists. However, in addition to this demand, there is probably an increased interest shown by students in applied courses. This trend is not unique to psychology. The emphasis on technological or applied education has influenced many academic disciplines.

It is interesting to note that of the other departments in the College of Liberal Arts and Sciences, sociology has had a growth in majors quite comparable to that of psychology. Some departments, such as mathematics, botany, physics and German, have had only minor fluctuations, while some other departments such as English, French, and history have had a decrease in number of majors during the past twenty years.

The data presented in this study have several possible uses. Such data when compared with similar data from other departments would be useful in determining trends in liberal education. The findings also suggest possible bases for revising both individual courses and curricula. Finally, it is evident that such data might be of considerable value to administrators as a guide to an intelligent budgetary policy.

SUMMARY

This study reports the growth of student interest in psychology as a subject of major concentration by undergraduate students in the College of Liberal Arts and Sciences at the University of Illinois from 1925 to 1944 inclusively. One per cent of the students elected psychology as a major in 1925, and thirteen per cent in 1944. The data might be used as an aid in revising curricula or as a guide to an intelligent budgetary policy.

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PSYCHOLOGY AND SOCIAL RELATIONS AT HARVARD UNIVERSITY

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THE following paragraphs announce changes in research and instruction in psychology at Harvard University, changes consequent upon the establishment of the new Department of Social Relations and the transfer of social psychology and clinical psychology from the Department of Psychology to the new Department.

SOCIAL RELATIONS

On February 1, 1946, the Provost of Harvard University announced the establishment of a new *Department of Social Relations* under the Faculty of Arts and Sciences. This Department will incorporate all of the present Department of Sociology, that part of the Department of Psychology which has dealt primarily with social and clinical psychology, and that part of the Department of Anthropology concerned primarily with social anthropology. The new Department is empowered to offer an undergraduate program of concentration in social relations, and graduate programs leading to the Master of Arts and Doctor of Philosophy degrees in Sociology, Social Anthropology, Social Psychology, and Clinical Psychology. Instruction will begin in the Summer Term of 1946.

The plan for the new Department was formulated and presented to the Faculty of Arts and Sciences by a special Committee of the three Departments of Anthropology, Psychology and Sociology. Members of the committee were Professor Talcott Parsons, Chairman, G. W. Allport, E. G. Boring, Donald Scott, A. M. Tozzer, C. C. Zimmerman. The following paragraphs, adapted from the report of the Committee, explain the background of the new academic venture.

While the lines that mark off academic departments reflect to some degree the inherent

logic of subject-matter, they also reflect the influence of historical circumstances which inevitably change in the course of time. The development of the Departments of Anthropology, Psychology, and Sociology at Harvard has followed distinct sets of circumstances, and up to the present time these Departments, closely linked in much of their subject-matter, have had little effective relation with one another.

While departmental lines have remained rigid there has been developing, especially during the last decade, a synthesis of socio-cultural and psychological sciences which is widely recognized within the academic world in spite of the fact that there is no commonly accepted name to designate the synthesis. We propose that Harvard adopt, and thus help establish, the term *Social Relations* to characterize the emerging discipline which deals not only with the body of fact and theory traditionally recognized as the subject-matter of sociology, but also with that portion of psychological science that treats the individual within the social system, and that portion of anthropological science that is particularly relevant to the social and cultural patterns of literate societies.

The recent war greatly accelerated the fusion of research activities in this common territory. Work on wartime projects virtually obliterated distinctions that were already breaking down between social scientists engaged in the study of fundamental problems of social relations. The emergence, nearly twenty years ago, of an area of investigation known as "culture and personality" was perhaps the first sign of discontent with the narrow specialization of research conducted independently by anthro-

pologists, psychologists, or sociologists without benefit of cross-fertilization of the three disciplines. In more recent years many other topics of joint concern have been defined, including community analysis, attitude assessment, the process of socialization in childhood and youth, the study of group conflict and prejudice, factors in national and institutional morale, the nature of institutional behavior, aspects of communication and propaganda, ethnic and national differences and similarities, problems of social and mental adjustment of the individual in his social situation. Although this list could be considerably extended, these topics are sufficiently representative of the modern cooperative trend among the basic social sciences.

In addition to having common problems for investigation, modern students of social relations find that they require common skills and tools. Statistical sampling, interviewing, participant observation, group experiments, coding and machine sorting, community mapping, life-history analysis, are among the instruments of research that need to be brought together into a common, but as yet non-existent, laboratory of Social Relations.

It seems inevitable that urgent and increasing demands will be laid upon the University for the study of the "human factor" in a technological and atomic age. The pressure will come in part from the federal government, in part from the local community, and in part from the social conscience of the University itself. An efficient Department of Social Relations with its adjunct laboratory, will be needed to help to select, implement and execute the most worthy projects among those that will be pressed upon the University.

The synthesis of these three social sciences began to create administrative perplexities for American universities more than a decade ago. Some institutions attempted to settle the issue in the manner of least resistance by appointing interdepartmental committees, or, occasionally, the term "Institute" was employed for the resulting committee structure. There is, for example, the Yale Institute of Human Relations, The Chicago Committee on Human Development and Committees on Social Research, and

the North Carolina Institute of Research in the Social Sciences. At Harvard the only attempt thus far has been the establishment of a program of concentration in the Area of Social Science. This device represented an attempt to integrate undergraduate instruction in the closely related basic social sciences, but did not foster cross-disciplinary graduate training or research.

As yet no university has recognized the unity of this field by placing it under the jurisdiction of a single department having authority to train for both undergraduate and graduate degrees and to maintain a research laboratory where joint investigations may be carried on. Without reviewing here in detail the experience of the committee structure tried in other institutions, we may say that this solution has not been satisfactory for it is not well suited to the problem in hand. We believe that Harvard should realign its departmental structure so as not only to permit but also to encourage a genuine fusion of the three specialties hitherto kept separate by traditional departmental lines of demarcation.

While offering four different subjects for the A.M. and Ph.D. degrees, the Department will require of all candidates a common foundation in the facts, theories, and methods that underlie the study of social relations.

The personnel of the new Department will include, from among the present Harvard staff, Talcott Parsons, Professor of Sociology and Chairman of the Department, G. W. Allport, Professor of Psychology, P. A. Sorokin, Professor of Sociology, C. C. Zimmerman, Associate Professor of Sociology, Clyde Kluckhohn, Associate Professor of Anthropology, George C. Homans, Associate Professor of Sociology, Robert W. White, Lecturer in Psychology and Director of the Psychological Clinic, Stanley G. Estes, Thelma G. Alper, and Jerome S. Bruner, Lecturers on Psychology, Oscar Handlin, Faculty Instructor in Social Science, and James G. Miller, Faculty Instructor in Psychology.

In addition, Samuel A. Stouffer, formerly Professor of Sociology at the University of Chicago and Director of Research in the Education and Information Division of the War Department, has been appointed Professor of Sociology, and will join the Department in September, 1946.

Professor Stouffer will become Director of the *Laboratory of Social Relations* which is planned as an integral part of the new Department. This Laboratory will provide physical facilities for many types of psychological and social research, offer training to students in empirical, statistical and field methods of investigation, and serve as a center for the development of various cooperative programs of research. The present Psychological Clinic, though retaining a separate identity, will form part of the new Laboratory.

PSYCHOLOGY

Psychology-new-style at Harvard will be Psychology-old-style with social and clinical psychology left out. The new Department of Psychology assumes responsibility for all of psychology except those fields which center upon "the individual in the social structure," as the key phrase goes. The new order conceives that parts of clinical psychology are primarily concerned with social adjustment, and it is for this reason that the case of clinical psychology was the most difficult to adjust to the fission. Clinical psychology, like psychiatry, is concerned with both social relations and the biological ground for them, and thus really pertains to both Departments.

It is the commonplace of academics today to speak of the evils of departmentalism, meaning that research and the total intellectual endeavor are hindered by the sharp lines of cleavage that form between university departments. Departmentalism is, however, not devoid of advantages. It is an arrangement for securing the motivational facilitation and the cooperative efficiency of the in-group. Any study of the collective action of a selfconscious group, which has secured to itself a label of its own, shows how departmentalism stimulates achievement. It is these advantages that the Harvard men who promoted the Department of Social Relations wanted and now have.

The fusion of Social Relations means, of course, the fission of Psychology, in respect of departmental lines. It is going to be easier for social and clinical psychologists at Harvard to cooperate with social anthropologists and harder for them to work with physiological psychologists. Against the best will in the world for ignoring boundaries, boundaries of some sort insist on existing. At Harvard we have weighed the fusion of social science against the

integrity of psychology as a single discipline and have decided in favor of the former, even while the American Psychological Association moves in the opposite direction for the fusion of all psychology.

It must be admitted that the residual members of the Department of Psychology at first were divided in their views regarding the fission, since they were offered no compensating advantages from any enlargement of their own intellectual horizon. The social psychologists could change spouses, but the residual psychologists were merely divorced. Certain advantages of divorce do, however, begin to appear as the new in-group forms. Psychology can now be clearly classed at Harvard as natural science, instead of perpetually having to straddle social science and natural science. Specialization, moreover, has its strength; there is no doubt that both kinds of psychology will grow faster when each has its own separate pasture. Psychology grew at Harvard after it and Philosophy were divorced in 1934. What is lost now in breadth is gained in unity, and Psychology's effort can become more concentrated in certain directions. For instance, the laboratory can again come to dominate the Department.

The Department of Psychology will, as the opportunity arises, offer instruction or undertake research in general experimental psychology, in psychological methods, measurement and statistics, in physiological, genetic and comparative psychology, in psychophysics and the psychology of sensation and perception, in the psychology of learning and memory, in the psychology of feeling, emotion and motivation, in speech, communication and thought, in the psychology of reaction and efficiency, and, it is hoped, eventually in certain fields of applied psychology where the socialization of the individual is not the central theme. The Department of Social Relations formally takes over social psychology and clinical psychology, and, because of its history, the Harvard Psychological Clinic. Certain other fields seem to remain common, notably abnormal psychology, child psychology and the psychology of personality. While these subjects could properly be promoted in either department, it is more likely that they will be carried on at first in the Department of Social Relations in association with clinical psychology.

The Department of Psychology acquires the entire

Psycho-Acoustic Laboratory and its new quarters in the basement of Memorial Hall. Experimental psychology is immeasurably strengthened by the addition of this formerly independent laboratory to the Laboratory of General Psychology, and especially by the fact that the contracts between the Psycho-Acoustic Laboratory and the Navy have been so written that members of the Psycho-Acoustic Laboratory can give limited instruction in the Department of Psychology, and members of the Department of Psychology can undertake research in the Psycho-Acoustic Laboratory.

The prospective initial instructing staff of the Department of Psychology are as follows: Edwin G. Boring, Professor of Psychology, Director of the Laboratory of General Psychology and Chairman of the Department; S. Smith Stevens, Associate Professor of Psychology, and Director of the Psycho-

Acoustic Laboratory; John G. Beebe-Center, Lecturer on Psychology; Edwin B. Newman, Lecturer on Psychology, Associate Director of the Psychological Laboratories and Secretary of the Department; J. C. R. Licklider, Lecturer on Psychology; Leo J. Postman, Instructor in Psychology; George A. Miller, Research Fellow in the Psycho-Acoustic Laboratory. There is at present one vacancy in the bracket of permanent appointments, and one for a five-year term. In addition the Department can call upon the services of the other Research Fellows in the Psycho-Acoustic Laboratory: Drs. Clarence V. Hudgins, Karl D. Kryter, Gordon E. Peterson and Francis M. Wiener.

The final locations of the Laboratory of General Psychology and the Laboratory of Physiological Psychology, as also of the Laboratory of Social Relations, are as yet to be determined.

COMMITTEE ON INTERNATIONAL PLANNING

THE Committee on International Planning has met several times during the past year. The discussions have been primarily upon the methods of getting in touch with foreign psychologists and ascertaining their needs. The possibilities of an International Congress have also been discussed, and the Chairman has corresponded with British psychologists on the subject. It will be remembered that the Congress which was to follow the one at Paris, and which was postponed on account of the war, was to have been held at Edinburgh. Owing to the unsettled conditions at present throughout the world, it is obviously not the time to make plans for the next Congress, but the general opinion seems to be that a Congress should be held as soon as conditions permit. It is also hoped that the Standing Committee of the International Congress will be more active between Congresses. It could very well take on some of the functions of an international union.

It was evident from our correspondence that foreign psychologists are greatly in need of American literature from 1940 on. It was therefore suggested to the Committee on Publications that the American Psychological Association send back numbers of our publications to foreign psychologists. A motion to that effect was passed by the American Psychological Association and the necessary steps are being taken to send back numbers abroad. The Chairman has sent books to a number of foreigners and has received publications in exchange.

The Committee has been in correspondence with leading psychologists in various countries and a number of replies have been received. Information about foreign psychologists gathered from these and other sources will probably be of most interest to the readers of this JOURNAL.

Professor Michotte of Louvain, Belgium, has worked in his laboratory relatively undisturbed during the Occupation, although it was work under difficult circumstances. He did not suffer too much materially but sorrowed for the loss of his many friends. Since 1940 he has been busy experimenting on new methods to study the perception of causality. He is very enthusiastic about the results of this

work which are soon to come out in book form. He feels the lack of American literature as he has had nothing since 1940. He is also in need of books, for the Louvain Library was again destroyed.

Several letters were received from Professor Ponzo. The Institute of Psychology at Rome, though damaged by bombing, is fast regaining its normal aspect. He informs us that several chairs in psychology have been discontinued in recent years. He would therefore like all possible encouragement from American psychologists. He is also badly in need of American literature since 1939.

Professor Piéron and Mrs. Piéron worked in their laboratories at the Sorbonne throughout the Occupation. Lately they have seen several American psychologists in the armed forces. They are well although they suffered from persistent interruptions.

Professor Pierre Janet was in the country during the Occupation but is now back at his old address in Paris. According to Piéron, he is marvellously young. Janet's letter shows evidence of his characteristic enthusiasm. He is in good health at the age of 86 and is writing a two-volume work on *Les Formes de la Croyance*.

Professor Germain of Madrid has translated into Spanish and just published David Katz's book, *Gestalt Psychology*. He is also publishing *Monographies de Psychologie normale et pathologique* and would like suggestions of American articles to be translated and published in these monographs. Professor Germain writes that Father Zargueta, a former pupil of Michotte, has been in charge of the Institut de Philosophie "Louis Vives" as vice-director since the death of Father Babado, who before the Civil War was professor of psychology at the Université Angelicum at Rome.

Professor Eugene Shen, who remained at work in St. John's University in Shanghai during the entire war, feels himself out of touch with what has been going on in psychology in America. He is much in need of books.

Several letters have been received from Professor Leon Litwinski of Monte Estoril, Portugal. He has expressed himself as extremely grateful to be able to renew American contacts. He has just published a paper on war neuroses.

Professor Wilhelm Wirth is now living in Amberg in Bavaria. He writes concerning the war destruction in Leipzig which included the University between Universitätsstraße and Augustusplatz. The Psychological Seminar was in this area. His own house was entirely destroyed, together with his library of six thousand books. He tried to continue his lecture in Leipzig but had to retire on account of heart trouble. He was forced to discontinue the *Archiv für die Gesamte Psychologie* after Volume 112. At the present time he is working entirely on the philosophy of religion and has completed a sizeable manuscript on *The Science of Religion* based upon epistemology and moral philosophy. He would like to replace the English-American books that were destroyed. Among desired items he mentions the two main works of Spearman, the *Introduction* by Udnye Yule, the books of Truman Kelly, of Lazarfeld, and Murchison's *Psychology in Autobiography*.

Professor David Katz of the University of Stockholm, Sweden, has been doing considerable research work in his laboratory. He reports that interest in psychology has increased in recent years in Sweden. He also writes that Dr. Rubin, who was for two years in Sweden during the Occupation and who was seriously ill, has made a satisfactory recovery.

Professor Theodor Rutten of Nijmegen, Holland, visited America last summer to attempt to raise money for a new laboratory and library. His

laboratory, which was built in 1930, expanded rapidly until 1940 when it was totally destroyed. His department had been engaged for ten years in standardizing intelligence tests based on American work. The results could not be published during the Occupation and now have all been lost. He needs financial support to repeat the study. He had little success in obtaining any funds while in America, but is still hopeful. In this regard it should be added that the Committee is very much concerned about the need of financial assistance to restore foreign laboratories and libraries, and is endeavoring to find some source for the necessary subsidies.

It has been relatively easy for most of us to keep in touch with some of our British colleagues, so that there is little to report at present that would be new.

On instructions from the Committee the Chairman is trying to compile a list of active psychologists, together with their addresses, of the various foreign countries. Replies are just coming in, and the results of the inquiry will be published in a subsequent report. We are particularly in need of contacts with our Russian colleagues. Any information that can be furnished the Committee in regard to activities in Russia as well as any of the other countries will be appreciated.

W. S. HUNTER

W. R. MILES

R. M. YERKES

H. S. LANGFELD, *Chairman*

Across the Secretary's Desk

THE BUSINESS OF THE APA

The APA has centralized many of its business functions; it has decentralized others. Before the new constitution went into effect, APA affairs were managed from a Secretary's office in Ann Arbor and a Treasurer and Business Manager's office in Evanston. The AAAP was similarly decentralized, with a Secretary's office in New York, a Treasurer's office in Hartford, and a Business Manager's office in Wichita. The two organizations jointly supported a sixth office, the Office of Psychological Personnel in Washington. The new organization brings the functions of all six offices together under the direction of an executive secretary.

Decentralization has occurred through the creation of 19 divisions, each one responsible for carrying on some of the activities formerly handled by APA and AAAP offices. The 19 divisions have 19 Chairmen and 19 Secretaries; they live in 21 cities scattered from New England to Southern California. Since this geographical scatter is inevitable, procedures must be developed for coordinating APA and divisional work in spite of it.

There are several situations in which action by the APA should be based upon prior action by the divisions. The APA Convention Program Committee, for example, must plan a program for the September meetings in time to have copy ready to go to press by June first. The Convention Program Committee is not only responsible for planning the APA program but also for coordinating the programs of the divisions. The divisions obviously must complete their programs in time for the APA committee to go over them, prepare a schedule that will minimize the conflict over which sessions to attend, assign rooms, arrange for APA sessions, and get the entire program into shape. If a division fails to complete its task, the APA committee can do nothing except to go ahead, leaving that division out of the plans and the program. The members of that division may not like it, but the whole APA can not wait on one tardy division.

The election machinery presents a similar picture.

According to the By-Laws, the APA nominating ballot should have been mailed by March first to call for nominations for President-elect and Regional Representatives. The same ballot may, if the divisions so request, call for nominations for the divisions. Such nominations will include Council Representatives and may include divisional officers. On March first, we had heard from only two divisions. The APA Election Committee will report a slate of candidates for the final ballot by May first and also will report nominations from the divisions. By June first, the final ballot will be mailed. If a division has failed to do its part of the work, the APA ballot will go out without listing the names of candidates for offices of that division. Presumably, the division would then conduct its own poll. If this is not complete by September, the former officers would no doubt be asked to serve at the annual meeting.

The problems of coordination are especially difficult this year. Divisional organization is not complete; centralization of the APA-AAAP offices is not complete. Since January first, I have been devoting half time to the APA, and that time has been split between two locations. The financial and publications business has been handled from an office at American University, and the editorial and personnel work in the former Office of Psychological Personnel. Now that we have leased offices at 1227 19th Street, N.W., the two parts can be brought together.

The divisions have also been having trouble getting under way. Procedures have not yet shaken down into good operating routines. With the APA office brought together under one roof, more help to the divisions can be given. Nevertheless, the divisions must take the initiative in getting their organizations working smoothly. Some of them, in fact, would consider anything else an infringement of their autonomy.

Still, the APA can not wait for late divisions, but must proceed approximately on schedule to get its elections and program ready for September 1946.

Psychological Notes and News

At the request of General MacArthur several educators and psychologists recently spent a month in Japan advising the supreme commander and the Japanese Ministry of Education on problems of reeducation. Among the group were FRANK N. FREEMAN, dean of the School of Education, University of California, Berkeley; ERNEST R. HILGARD, chairman of the department of psychology, Stanford University; W. CLARK TROW, professor of educational psychology, University of Michigan, and GEORGE D. STODDARD, New York State Commissioner of Education and president-elect of the University of Illinois.

ROBERT P. FISCHER, formerly research examiner at the University of Illinois, has been appointed professor and head of the department of psychology at Birmingham-Southern College.

AGNES A. SHARP has returned to the Psychiatric Institute of the Municipal Court of Chicago as chief psychologist, assistant director, and director of research. During her eighteen months' leave from the Institute, Dr. Sharp established and served as head of the Medical Department of the A. B. Dick Co.

JAMES G. MILLER has been appointed Chief Clinical Psychologist for the Veterans Administration. During the war Dr. Miller served with the Office of Strategic Services.

SAMUEL P. HAYES, JR. is now assistant director of marketing research for Dun & Bradstreet, Inc. Dr. Hayes has been special representative in Norway and Denmark for the Foreign Economic Administration.

At Temple University several changes have recently occurred in the department of psychology. EMMETT A. BETTS, formerly research professor and director of the Reading Clinic at the Pennsylvania State College, has been appointed professor of psychology and director of the Reading Clinic. ROY B. HACKMAN, Comdr., USNR, has returned as

assistant professor and director of the Educational and Vocational Guidance Clinic. JAMES D. PAGE, Lt. Comdr., USPHS, has returned as assistant professor and director of the Psychological Clinic. HAROLD C. REPPERT, who has worked during the war with the National Defense Research Committee, has been appointed assistant professor and director of the University Testing Bureau.

Three psychologists recently released from military duty have accepted appointments as clinical psychologists at the Veterans Hospital, Bronx, New York. They are HERMAN R. WEISS, Lt. (jg), USMS, who was Classification and Selection Officer at the Training Station, Sheepshead Bay, Brooklyn, New York; JEROME W. KOSSEFF, 1st Lt., Air Corps, who served as Chief Psychologist of the 2nd Central Medical Establishment, Far East Air Forces; and ROBERT M. ALLEN, 2nd Lt., AGD, formerly Chief Psychologist of the Regional Hospital, Neuropsychiatric Service, Camp Crowder, Mo.

MITCHELL DREESE, director of the veterans educational bureau at George Washington University, has been commended by the Secretary of War for his work as chief of the Demobilization Procedures Center Headquarters in Washington, D. C.

IRVING C. WHITMORE, professor of psychology at Boston University, has returned to Boston University to become director of the veterans program. Colonel Whitmore has been in service with the Army since the spring of 1942.

DANIEL HARRIS, Lt. Comdr., USNR, has been appointed vocational adviser in the Vocational Rehabilitation and Education Division of the Veterans Administration and assigned to the New York Regional Office. Dr. Harris, who served four years with the Bureau of Medicine and Surgery of the Navy, was formerly in private practice, specializing in vocational guidance.

The department of psychology at the Johns Hopkins University has announced that STANLEY B.

WILLIAMS, who served as Lt., USNR, at the Medical Field Research Laboratory, Camp Lejeune, North Carolina, has been appointed assistant professor; and WENDELL R. GARNER, who was engaged in war research under the auspices of the National Defense Research Committee at the Radio Research and Psycho-Acoustic Laboratories, Harvard University, has been appointed an instructor.

G. M. GILBERT has been acting as prison psychologist at the war crimes trials of the International Military Tribunal in Nürnberg. Psychological tests were given to the prisoners before the trials, and detailed studies are in progress to evaluate the personalities and motivation of the Nazi leaders.

DAVID C. McCLELLAND has returned to Wesleyan University as assistant professor and acting chairman of the department of psychology. For more than two years he has been assistant personnel secretary of the American Friends Service Committee.

WALTER J. McNAMARA, recently released to inactive duty by the Navy, has returned to the department of education of the International Business Machines Corporation, where he will act as consultant in educational tests and measurements and as director of educational research for the IBM educational program.

ROBERT J. LEWINSKI, Comdr. H(S), USNR, has accepted a position as assistant to the personnel director of the Toledo branch of the Great Atlantic and Pacific Tea Company. Dr. Lewinski, recently released to inactive duty by the Navy where he served as a senior psychologist and member of various naval aptitude boards, will be engaged in the examination of prospective employees and the construction of tests to measure aptitude for specific jobs in the company.

J. L. M. HEROLD, psychologist for the Netherlands coal mines, has returned to Holland after a six months' visit in this country.

RICHARD S. SOLOMON is again a private consultant in industrial and business psychology at Dayton, Ohio. Dr. Solomon was formerly director of the Personnel Institute of Chicago and for the past three

years has been director of personnel and psychological research for the Standard Register Company of Dayton, Ohio.

ROBERT A. DAVIS, director of the Bureau of Educational Research and Service at the University of Colorado, will be a guest professor next summer at the University of Southern California. Dr. Davis recently accepted an appointment as general editor of the Lippincott series of books in psychology and education.

SIDNEY M. NEWHALL is directing psychological research in the Color Control Department of the Eastman Kodak Company. Dr. Newhall was formerly technical director of the Fire-Control Research Laboratory of the Foxboro Company.

W. J. BROGDEN, associate professor of psychology at the University of Wisconsin, has been appointed visiting lecturer on psychology for the twelve-week summer term at Harvard University. He will offer a course in the psychology of learning and a seminar on the conditioned response. GEORGE A. MILLER, research fellow in the Psycho-Acoustic Laboratory, will give a new course on speech and communication.

PAUL S. FAY has been appointed vocational adviser in the Indianapolis Regional Office of the Veterans Administration and extension lecturer in psychology in the Extension Division of Indiana University. Since 1943 he has been technical consultant to the Indiana State Personnel Division. Until 1944 he was professor of psychology and director of the radio studio at DePauw University.

JAMES R. PATRICK, Lt. Col., AGD, has resumed his teaching duties as professor of psychology at Ohio University after serving for over three years as a personnel consultant and clinical psychologist in the Army Service Forces.

Recent appointments in the department of psychology at the University of Pittsburgh include ROGER W. RUSSELL, as assistant professor, VICTOR C. RAIMY as assistant professor, and JOHN A. VALENTINE as instructor. The department of psychology, including the laboratory and clinical facilities as well

as departmental offices, is now located on the sixteenth floor of the Cathedral of Learning.

SIDNEY JANUS, Lt., USNR, has been appointed Technical Services Specialist, United States Employment Service at Atlanta, Georgia. He will direct a region-wide program of occupational analysis, industrial services, and staff training and will also continue as part-time instructor in industrial psychology at the Georgia School of Technology.

REIGN H. BITTNER has been appointed director of personnel research for the Owens-Illinois Glass Company. During the war Major Bittner served as Executive Officer of the Personnel Research Section, Classification and Replacement Branch, Adjutant General's Office.

M. D. E. DE LEVE, lecturer in psychology at the Central Institute for the Study of Language and Literature and at the College for Nursery School Teachers, The Hague, Holland, is in need of information concerning recent progress in American psychology. Books on general and child psychology and on tests and measurement are especially desired. An invitation has also been extended to traveling American psychologists to lecture at the Institute on developmental and pedagogical psychology.

The W. E. Upjohn Institute for Community Research has been established in Kalamazoo, Michigan, to conduct research on employment and other economic, social, and psychological problems of the community. HAROLD C. TAYLOR, formerly employment manager of the Hawthorne plant of the Western Electric Company, is director. SAMUEL V. BENNETT, formerly of the Institute of Aviation Psychology, University of Tennessee, and CHARLES C. GIBBONS, formerly director of personnel research for the Owens-Illinois Glass Company, have also joined the staff. The Institute staff wishes to maintain cooperative relationships with psychologists interested in this research field.

A small group of psychologists and sociologists formerly with the Research Branch, Information and Education Division, War Department, are at present engaged in the analysis of research materials collected by the Research Branch during the war and

the preparation for publication of materials likely to be of interest to professional social scientists. Four volumes are expected to go to press in the autumn of this year; two will analyze substantive materials on the social psychology of American troops during World War II, a third will present experimental studies on problems in communication especially with respect to Army orientation and training, and the fourth will contain methodological and technical materials developed in the work of the Research Branch.

The project is sponsored by the Social Science Research Council through a special committee headed by F. H. OSBORN, formerly the Major General in charge of the Information and Education Division, and is financed by a grant from the Carnegie Corporation. It is directed by SAMUEL A. STOUFFER, Harvard University, and CARL I. HOVLAND, Yale University. Other psychologists working on the project are IRVING L. JANIS, ARTHUR A. LUMSDAINE, FREDERICK D. SHEFFIELD, M. BREWSTER SMITH, and EDWARD A. SUCHMAN.

New officers of the National Council of Women Psychologists are: GERTRUDE HILDRETH, president; HARRIET A. FJELD, vice-president; MILDRED A. MITCHELL, secretary; and RUTH M. PATTERSON, treasurer. KATHRYN MAXFIELD, METTA M. RUST, GLADYS C. SCHWESINGER, and EMILY STOGDILL were elected to the Board of Governors.

The Institute for Research in Child Psychology has been reorganized as the Institute for Research in Clinical and Child Psychology. At the last annual meeting, the officers elected were LIVINGSTON WELCH, director, LOUIS LONG, treasurer, and BERNARD F. RIESS, secretary. Members of the Advisory Council are: Philip Curoe, Oskar Diethelm, W. H. Gantt, Clark L. Hull, Arthur T. Jersild, Wolfgang Köhler, William S. Langford, H. S. Liddell, Jules Masserman, Dorothea McCarthy, Emil Oberholzer, Frank J. O'Brien, James M. Gorman, S. Bernard Wortis, and Gardner Murphy, chairman.

Journal of Personality is the new name of the quarterly formerly called *Character and Personality*. The primary purpose of the journal is to serve as a coordinating medium of publication for original scientific investigation within all major research

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areas concerned with personality. These include studies of personality structure, its biological aspects, its expression in behavior dynamics and its development and functioning in varied cultural contexts. Emphasis will be placed on experimental and other empirical types of research within the field, but relevant theoretical and methodological contributions will be included. A fuller statement of the editorial reorientation appears in the September 1945 issue.

The Association of Military Clinical Psychologists, an informal and interim professional group, organized late in 1945 to facilitate the interchange of information among clinical psychologists in the military service, to improve morale, and to provide a better feeling of professional fellowship, announces the first issue of its bulletin for March 1946. Inquiries should be addressed to the Secretary-Treasurer of the association: Lt. H. J. Zucker, Oliver General Hospital, Augusta, Georgia.

The Southern Society for Philosophy and Psychology is holding its annual meeting in the Monticello Hotel at Charlottesville, Virginia, April 18-20. On Thursday evening there will be a symposium on the selection and classification of aircrew personnel in which JOHN C. FLANAGAN, Col., A.C., will describe the procedures used in the Army; JOHN G. JENKINS, Capt. H(S), USNR, will describe the procedures used in the Navy; PAUL M. FITTS, Lt. Col., A.C., will describe the procedures used by the Germans; and FRANK A. GELDARD, Col., A.C., will describe the procedures used by the Japanese. On Friday and Saturday mornings the usual programs on psychology and philosophy are scheduled.

Members planning to attend the meeting are reminded that hotel rooms will not be held beyond the hour for which they are engaged. It is strongly urged by the committee on arrangements that no one come to the meeting without a confirmed room reservation.

The Inter-Society Color Council will hold its annual meeting on May 6-7 at the Hotel Pennsylvania, New York City. Joint color sessions with the Society of Motion Picture Engineers have been planned. At a recent election of the Council, MICHAEL J. ZIGLER, professor of psychology at

Wellesley College, was chosen as a Counsellor for 1946-1947.

The American Society for Research in Psychosomatic Problems will hold its annual meeting on May 11 and 12 at the Hotel Pennsylvania, New York City. On May 11 the morning program will be "Contributions of Military Medicine to Psychosomatic Medicine" and the afternoon program, "Psychosomatic Aspects of Orthopedic Practice." Submitted papers will be presented on May 12. For information, address Dr. Roy G. Hoskins, American Society for Research in Psychosomatic Problems, Inc., 714 Madison Ave., New York 21, N. Y.

The Personnel Research Institute of Western Reserve University has expanded its program and opened a new center which will make possible the development of a training service for all activities in the field of vocational and industrial psychology in the Greater Cleveland Area. Activities in the new center will include veterans counseling, vocational guidance for the general public, personnel research in industry, and training in vocational and industrial psychology at both the undergraduate and graduate level. Approximately ten people are being added to the staff, among them several psychologists recently released from the armed services. JAY L. OTIS is director of the Institute.

The degree of Master of Personnel Service (MPS) is now being offered by the University of Colorado. Students who have a bachelor's degree from an approved institution with a major in business, economics, education, engineering, nursing, psychology, or sociology, or who have received a bachelor's degree in some other field but have had at least a year of approved experience in personnel work, may become candidates for this degree. Courses leading to the degree may be selected from a variety of departments, and there is provision for completing the program with or without a thesis. For further information about the program, address Dr. Harl R. Douglass, Director, College of Education, University of Colorado, Boulder, Colorado.

The relationship between heredity and social behavior in mammals is being investigated as a

Rockefeller project at the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine. A new Division of Behavior Studies has been formed. The research policy of the Laboratory is directed toward the development of basic theory in the field of comparative social behavior with particular emphasis on the role of heredity as one factor affecting that behavior. Studies of the direct effects of genetic factors on the behavior of animals and the indirect effects upon social organization and such social phenomena as leadership form a major part of the program. It is planned to concentrate the work on dogs, but to make comparative studies on other animals also. Besides dogs, other animals available for behavior studies include hamsters, rabbits, a small herd of goats and the many inbred strains of mice for which the Laboratory is well known.

The program for the coming summer will include provision for a few summer students and visiting investigators. In addition to the field of genetics and studies of growth and cancer, there will be opportunity for work in comparative psychology. Correspondence concerning the program may be addressed to the Jackson Memorial Laboratory, Bar Harbor, Maine.

An intensive course in audiometry and the fitting of hearing aids is being offered by the State University of Iowa, June 17 to July 29. It is open to anyone who can meet college requirements. The first twenty-four students whose applications are received will be accepted. In addition to this course, the full program in speech pathology and hearing conservation at the B.A., M.A., and Ph.D. level will be offered as usual. Address communications to Dr. Wendell Johnson, Director of the Speech Clinic, State University of Iowa, Iowa City, Iowa.

The Rorschach Institute, Inc. announces summer workshops at the Homestead, Crafts, New York, on June 2-22, and at the Occidental College, Los Angeles, California, on August 12-31. Students may register for one, two, or three weeks. Introductory seminars, requiring no previous Rorschach training, will be offered during the first week only. Intermediate and advanced seminars and study groups will be held throughout the three weeks. Tuition is twenty dollars per week. Applications

should be sent to Dr. Bruno Klopfer, 3820 Waldo Avenue, New York 63, N. Y.

Two Rorschach workshops under the direction of Dr. Marguerite R. Hertz will be offered by the division of psychology of Western Reserve University during June 1946. Rorschach Workshop I, "Introduction to the Rorschach Method of Personality Analysis," will be given June 10-14, and Rorschach Workshop II, "Advanced Course in the Interpretation of Rorschach Records and the Clinical Applications of the Method," June 17-21. The fee for each workshop is twenty dollars. For information write to Dr. Calvin S. Hall, Chairman, Division of Psychology, Western Reserve University, Cleveland 6, Ohio.

The Division of Neuropsychiatry, Michael Reese Hospital, announces its 1946 course in the Rorschach test to be conducted June 3-7, inclusive, by Dr. S. J. Beck. The teaching this year will focus especially on the more severe neurotic conditions. The Rorschach test records to be demonstrated will be those derived from patients in acute conflict, including those of war veterans. For information write to the Secretary, Division of Neuropsychiatry, Michael Reese Hospital, 29th Street and Ellis Ave., Chicago 16, Ill.

The National Committee for Mental Hygiene and the American Psychiatric Association have united to form the Psychiatric Personnel Placement Service. This nation-wide placement service is designed especially to help physicians and psychiatrists to make contacts with training opportunities, such as residencies, post-graduate courses, and fellowships, and to aid institutions in locating suitable candidates for appointments. Institutions participating in training of psychiatric personnel are invited to submit information regarding available positions and courses. Foundations, universities, and other agencies are asked to report fellowships in psychiatry, psychosomatic medicine, and child guidance. Inquiries should be addressed to the director of the service, Captain Forrest M. Harrison, (MC), USN, National Committee for Mental Hygiene, 1790 Broadway, New York 19, N. Y.

The United States Civil Service Commission has announced its procedures for the transitional post-war period. Temporary civil service regulations, replacing the war-service regulations, will determine the various aspects of federal employment until the regular civil service rules can be put into effect. Because the announcement of open competitive examinations and the establishment of registers of eligibles for permanent positions must be a gradual process, vacancies will continue to be filled on a temporary basis. Persons seeking permanent government employment should not file applications with the Commission until an examination for the positions in which they are interested has been announced. During the transition period, applications for many types of positions should be made directly to the federal agency in which employment is desired. Field establishments of most agencies have also been authorized to make appointments. The agencies are required to consider applicants in the following order: (1) "ten-point" veterans, (2) "five-point" veterans, (3) former federal employees who are not veterans, (4) others.

Externships in clinical and research psychology in the Psychiatric Division of Bellevue Hospital. The New York University College of Medicine, Department of Psychiatry, Psychiatric Division of Bellevue Hospital, offers a limited number of externships for special training in clinical and research psychology. For the present, externships carry no stipend; occasionally for special projects modest fellowships may be available. Requirements for externs in clinical psychology are the M.A. degree in psychology with courses in psychometrics and preferably some practice in testing. For the research fellowships, requirements are the M.A. degree in psychology or graduate work in psychology leading to the Ph.D. degree, or the M.D. degree, and evidence of capacity for carrying on independent research. Appointments are made for one year, beginning July first. Communications regarding these positions should be addressed to Dr. S. Bernard Wortis, Director, Psychiatric Division, Bellevue Hospital, 400 East 30th Street, New York 16, N. Y.

Internships at the Worcester State Hospital and the Worcester Child Guidance Clinic. Five internships

in clinical psychology at the Worcester State Hospital are available as full-time appointments for one year beginning either in July or September. The positions carry no cash stipend but provide complete maintenance, including room, board, laundry, and medical care. Applicants with graduate training in psychology equivalent to that required for a master's degree are preferred, but for the present, consideration will in special cases be given to those having a bachelor's degree with a major in psychology. The intern receives detailed supervised instruction in clinical psychometrics, including its theoretical, technical, administrative, and interpretative aspects. He partakes in departmental seminars, including case discussion of psychological material from patients. Regularly scheduled hospital staff conferences treat the individual cases with special emphasis on the coordination of material provided by various disciplines involved. The intern is expected to cooperate in the departmental and hospital research projects and to carry a minor research project during the year. He may also attend the research staff conferences. Opportunities are provided for attendance at a wide range of staff meetings, seminars, and lectures involving a number of related fields.

Applications are also invited for one internship at the Worcester Child Guidance Clinic, which is closely associated with the Worcester State Hospital but which has independent physical and professional status as a community clinic. Conditions for appointment are the same as for internships in the Worcester State Hospital. The intern receives detailed instruction in clinical psychometrics with children. A considerable portion of the time is devoted to training in therapeutic work and learning to integrate diagnostic and therapeutic activities with that of the other clinic personnel. There is also opportunity to participate in the seminars and conferences at the Worcester State Hospital.

Applications and credentials, including transcripts of undergraduate and graduate academic records, and letters of recommendation sent directly by three persons qualified to evaluate the applicant's background, experience, and qualification for clinical work, should be sent to Dr. David Shakow, Worcester State Hospital, Worcester 1, Massachusetts.

Convention Calendar

American Psychological Association, Inc.

Date: September 4-7, 1946

Place: University of Pennsylvania
Philadelphia, Pennsylvania

For information write to:

Dr. Dael Wolfe, Executive Secretary
American Psychological Association, Inc.
1227 19th Street, N. W.
Washington 6, D. C.

Eastern Psychological Association

Date: April 26 and 27, 1946

Place: Fordham University
Fordham Road and Third Avenue
Bronx, New York

For information write to:

Dr. Theodora Abel
Letchworth Village
Thiells, New York

Southern Society for Philosophy and Psychology

Date: April 18-20, 1946

Place: University of Virginia
Charlottesville, Virginia

For information write to:

Dr. Elizabeth Duffy, Secretary-Treasurer
Southern Society for Philosophy and Psychology
The Woman's College of the University of North Carolina
Greensboro, North Carolina

Rocky Mountain Branch of the American Psychological Association

Date and place: To be announced

For information write to:

Dr. Lillian G. Portenier
Department of Psychology and Philosophy
University of Wyoming
Laramie, Wyoming

Western Psychological Association

Date and place: To be announced

For information write to:

Dr. Ralph Gundlach
Department of Psychology
University of Washington
Seattle 5, Washington

Psychometric Society

Date and place: To be announced

For information write to:

Dr. Harold A. Edgerton
Occupational Opportunities Service
The Ohio State University
Columbus 10, Ohio

American Society for Research in Psychosomatic Problems, Inc.

Date: May 11-12, 1946

Place: Hotel Pennsylvania
New York, N. Y.

For information write to:

Dr. Roy G. Hoskins, Chairman
Program Committee
American Society for Research in Psychosomatic Problems,
Inc.
714 Madison Avenue
New York 21, N. Y.

Michigan Psychological Association

Date: April 12, 1946

Place: University of Michigan
Ann Arbor, Michigan

For information write to:

Dr. Barbara J. Sherburne, Secretary
Michigan Psychological Association
Recorder's Court Clinic
Clinton and St. Antoine Streets
Detroit, Michigan

Illinois Association for Applied Psychology

Date: April 25, 1946

Place: University of Chicago
Chicago, Illinois

For information write to:

Dr. Milton A. Saffir, Secretary
Illinois Association for Applied Psychology
55 East Washington Street
Chicago 2, Illinois

THE AMERICAN PSYCHOLOGIST is the official journal of the American Psychological Association. It is intended to serve the professional interests of all members of the Association. In addition to the reports, proceedings, and programs of the Association and of other psychological societies, the JOURNAL will contain articles on the professional problems of psychology. For the present, it will continue to publish some of the articles dealing with psychology and the war. But with the end of the war and the results of war research being declassified, thus making more detailed accounts available, many of the articles on psychology and the war can more appropriately appear in more specialized psychological journals.

The Editor welcomes any suggestion that would make the JOURNAL more useful to members of the psychological profession. Articles for possible publication are invited. Members of the Association are especially urged to send in psychological notes and news.

Manuscripts should be submitted in duplicate. In style and arrangement they should conform, insofar as possible, to the usage of the JOURNAL. The bibliographical references also should conform to standard practice of the Association journals. Figures and tables should be designed to occupy either a column 3 inches wide, or a page $6\frac{1}{4}$ inches wide.

As an aid in the preparation of manuscripts, contributors to the AMERICAN PSYCHOLOGIST, or to any of the other Association journals, should read: ANDERSON, JOHN E. and VALENTINE, WILLARD L. The preparation of articles for publication in the journals of the American Psychological Association. *Psychol. Bull.*, 1944, 43, 345-376.

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